



General Schematic of Antibody Structure

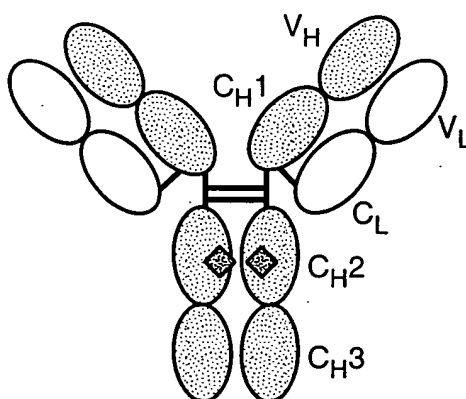


FIG. 1A

General Schematic of Antibody Fragments

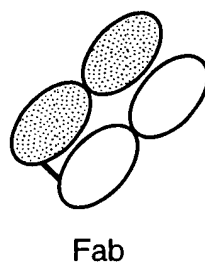
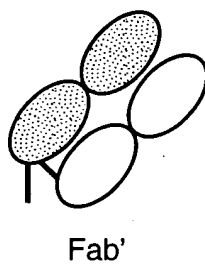
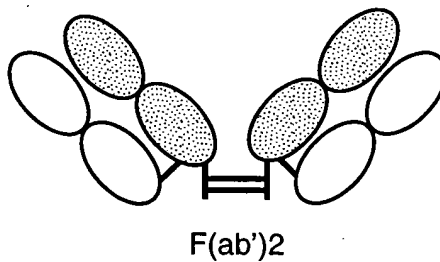
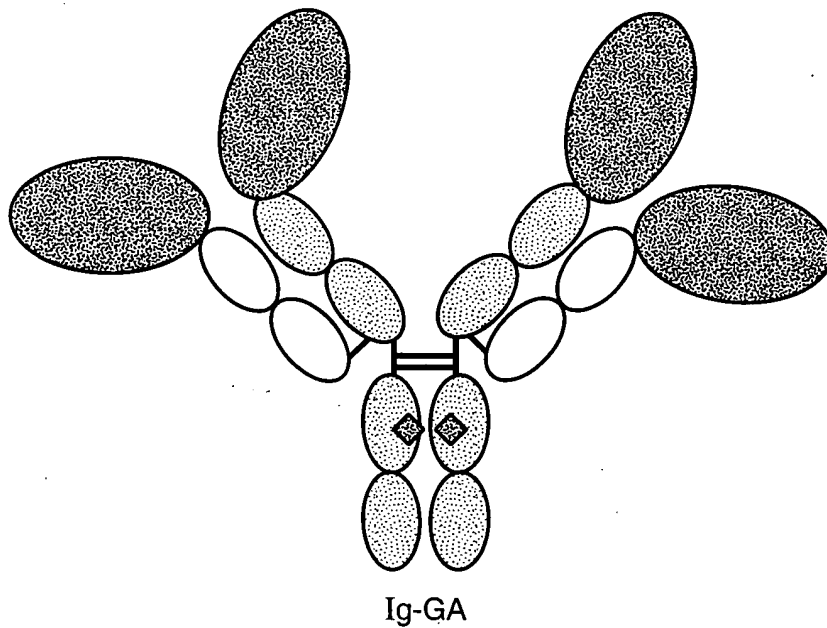


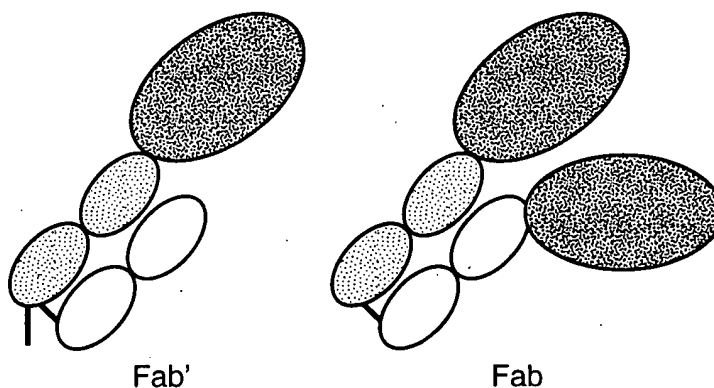
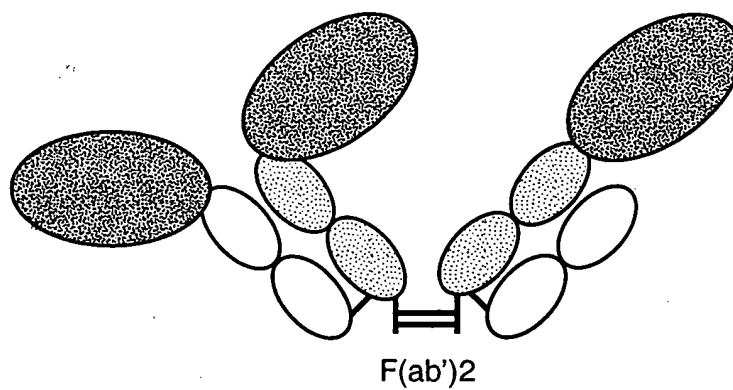
FIG. 1B

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General Schematic of Antibody-Glucoamylase Fusion

**FIG. 1C**

General Schematic of Antibody Fragment-Glucoamylase Fusions

**FIG. 1D**



Adsorption by Hydrophobic Association

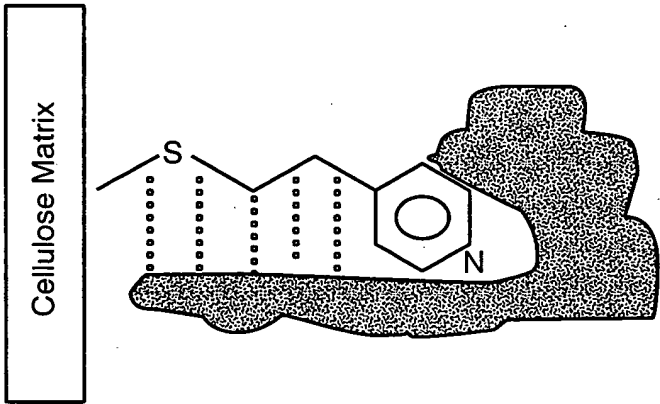


FIG._2A

Desorption by Ionic Repulsion

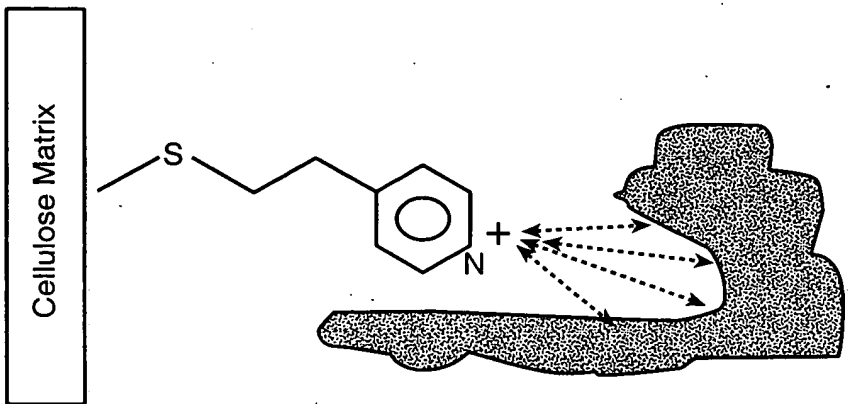


FIG._2B

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Sample loaded: 50 mL treated Fermentation 503 Supernatant UFC. Treatment includes neutralization of 500 mL to pH 7.7 with 50 mL 1 M NaOH; centrifugation 25000xg; and vacuum filtration through 0.8, 0.45, and 0.22 μ m filters with 10 g FW12 precoat.

Medium:	Protein A Ceramic HyperD F
Column:	HR 16/5, 5.4-mL CV, packed at 10 mL/min. 0.45 MPa
Load	
Buffer:	25 mM Tris, pH 7.7
Wash	
Buffer:	25 mM Tris, 500 mM NaCl, pH 7.7
Elution	
Buffer:	100 mM citrate, pH 2.5

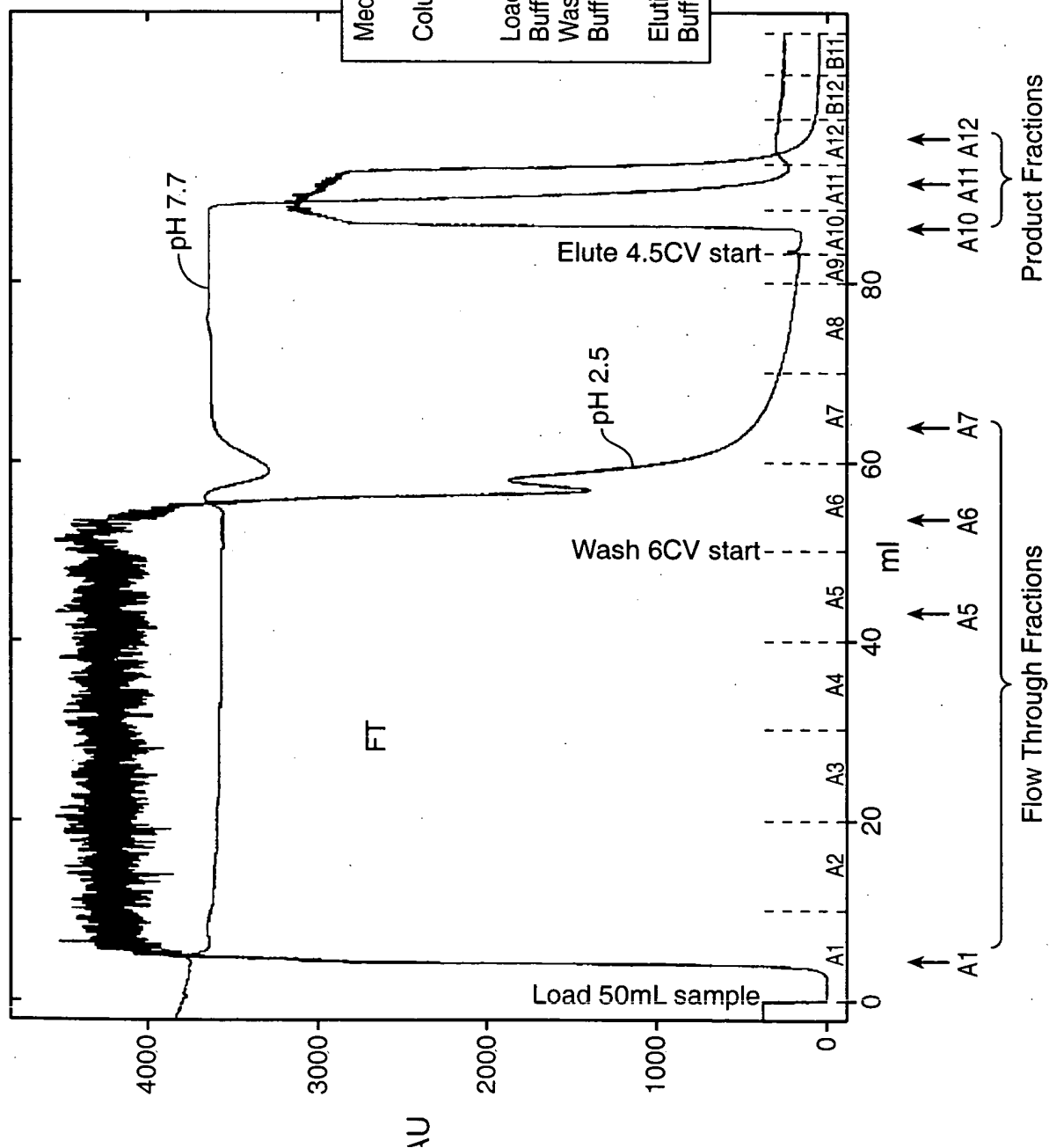


FIG._3A

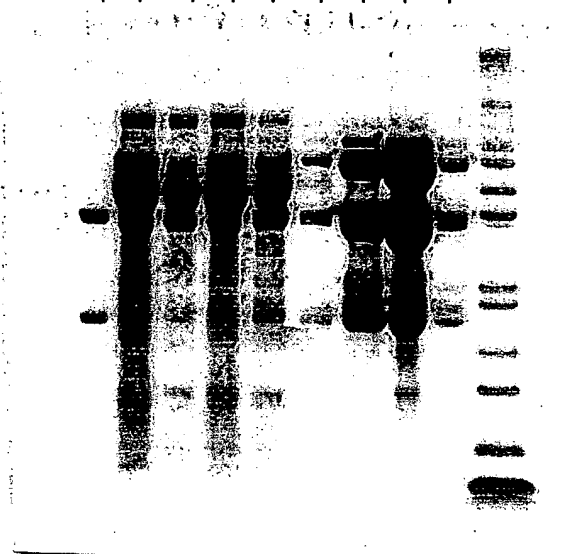
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PAC062602

4-12%
Bis-Tris
MES
SDS

Reducing

Herceptin
Feed: 20020503
supernatant
- A1
- A5
- A6
- A7
- A10
- A11
- A12



PAC062602

4-12%
Bis-Tris
MOPS
SDS

Non-reducing

Herceptin
Feed: 20020503
supernatant
- A1
- A5
- A6
- A7
- A10
- A11
- A12



FIG. 3B

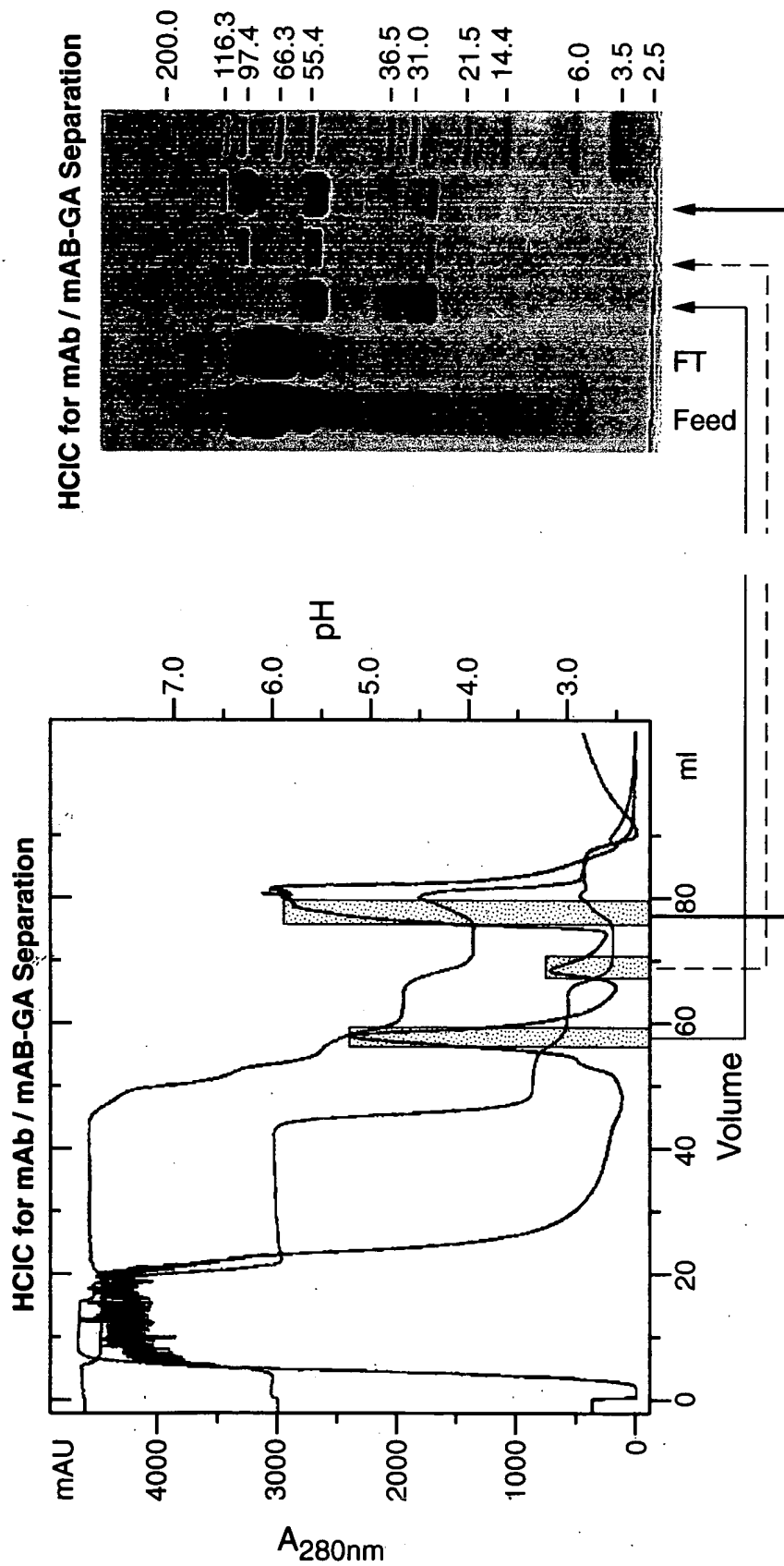


FIG._4A

FIG._4B

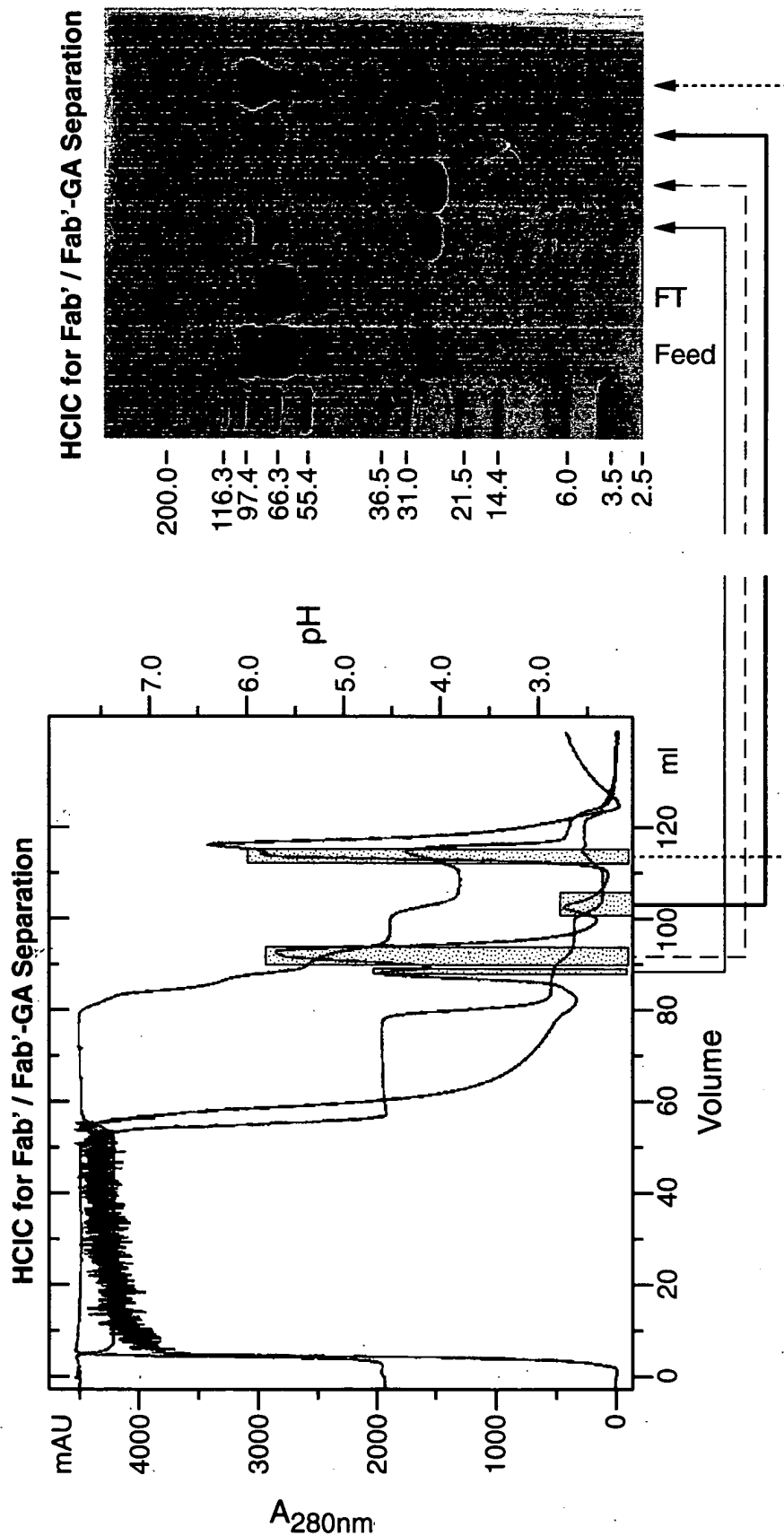


FIG._5B

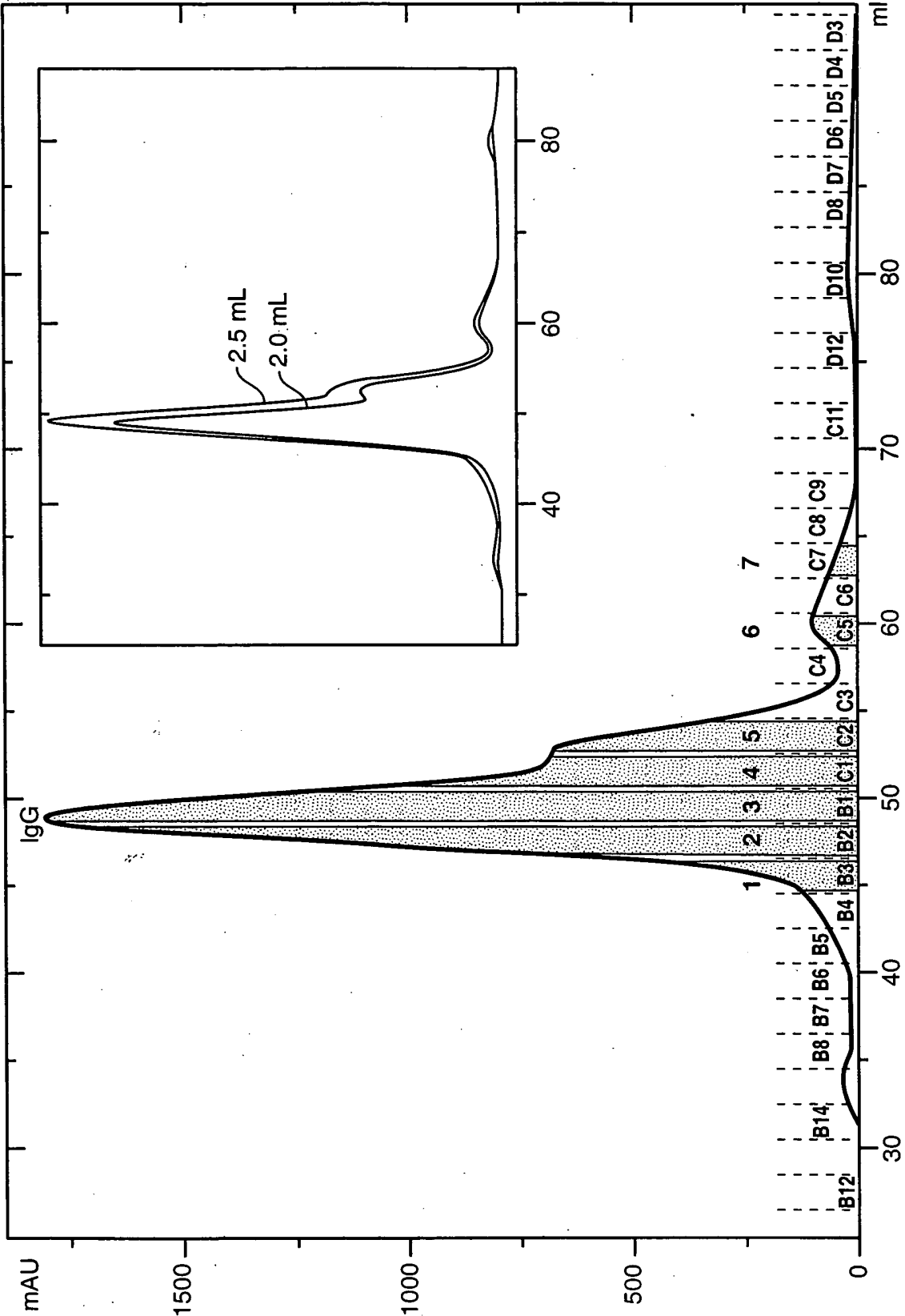
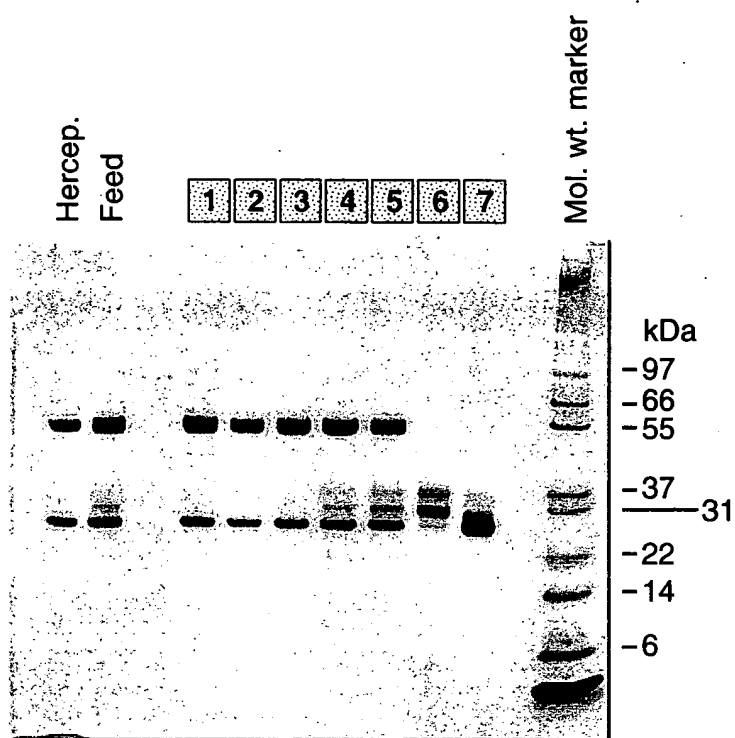


FIG._6A

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Reducing SDS-PAGE

FIG._6B

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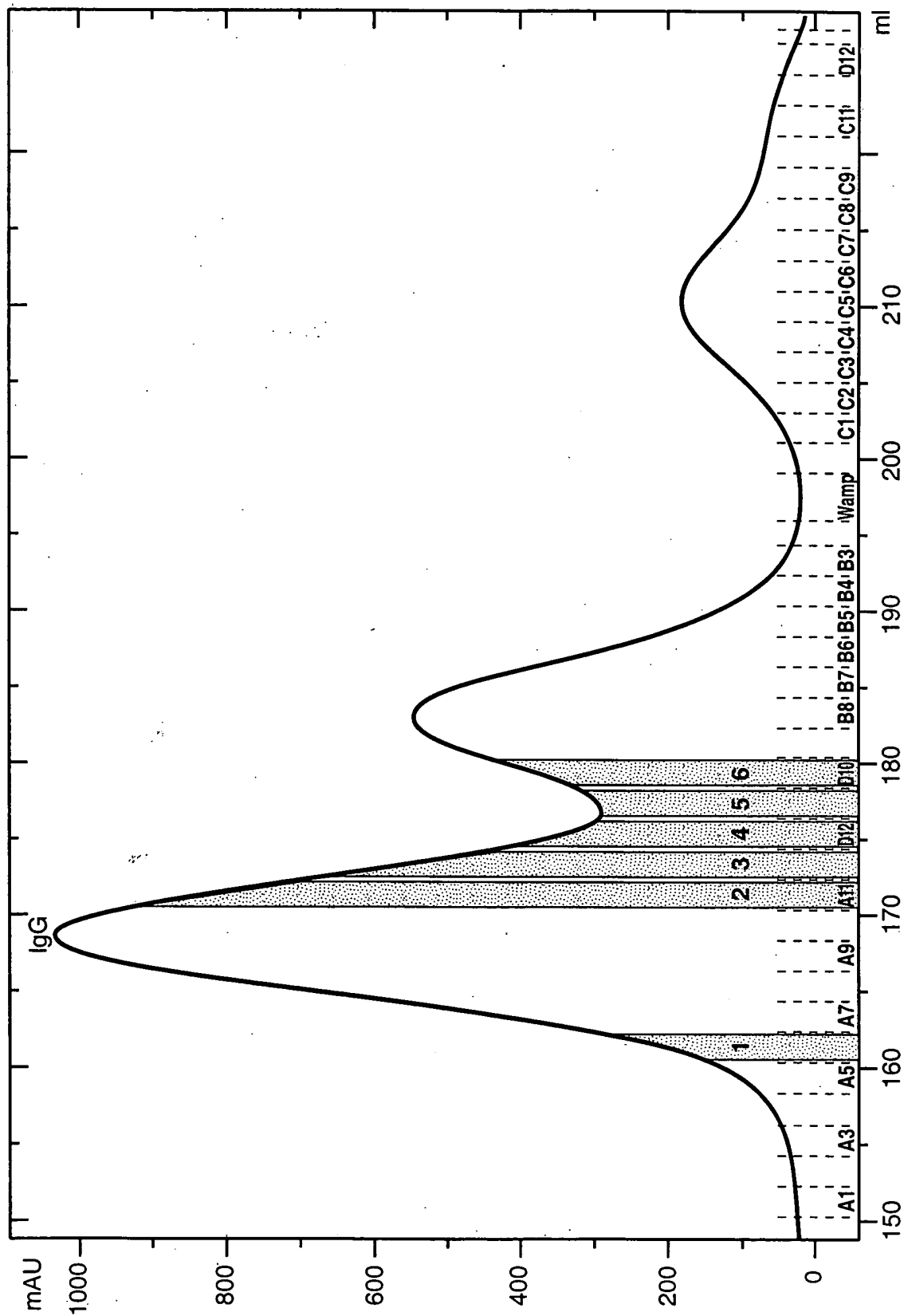
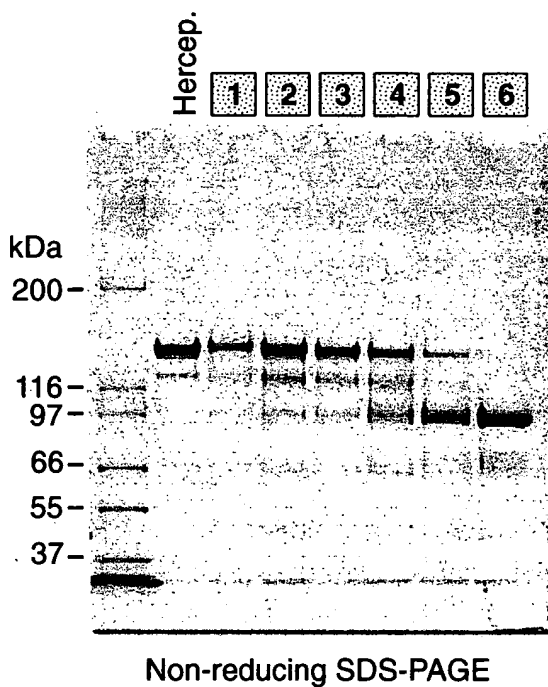
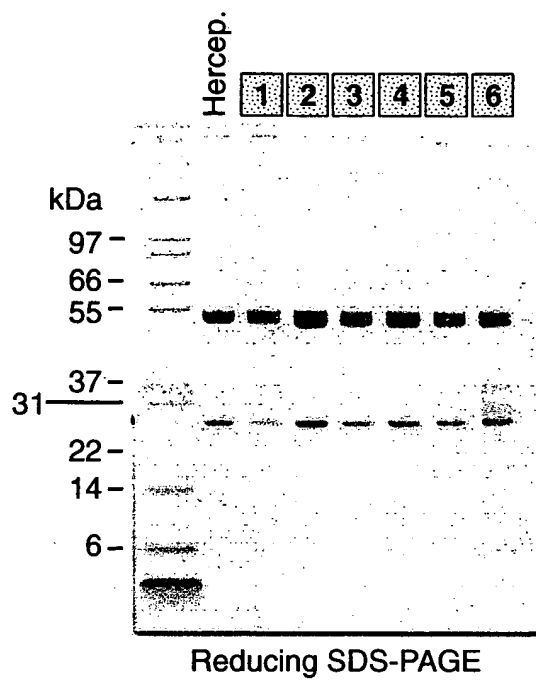


FIG. 7A

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**FIG. 7B**

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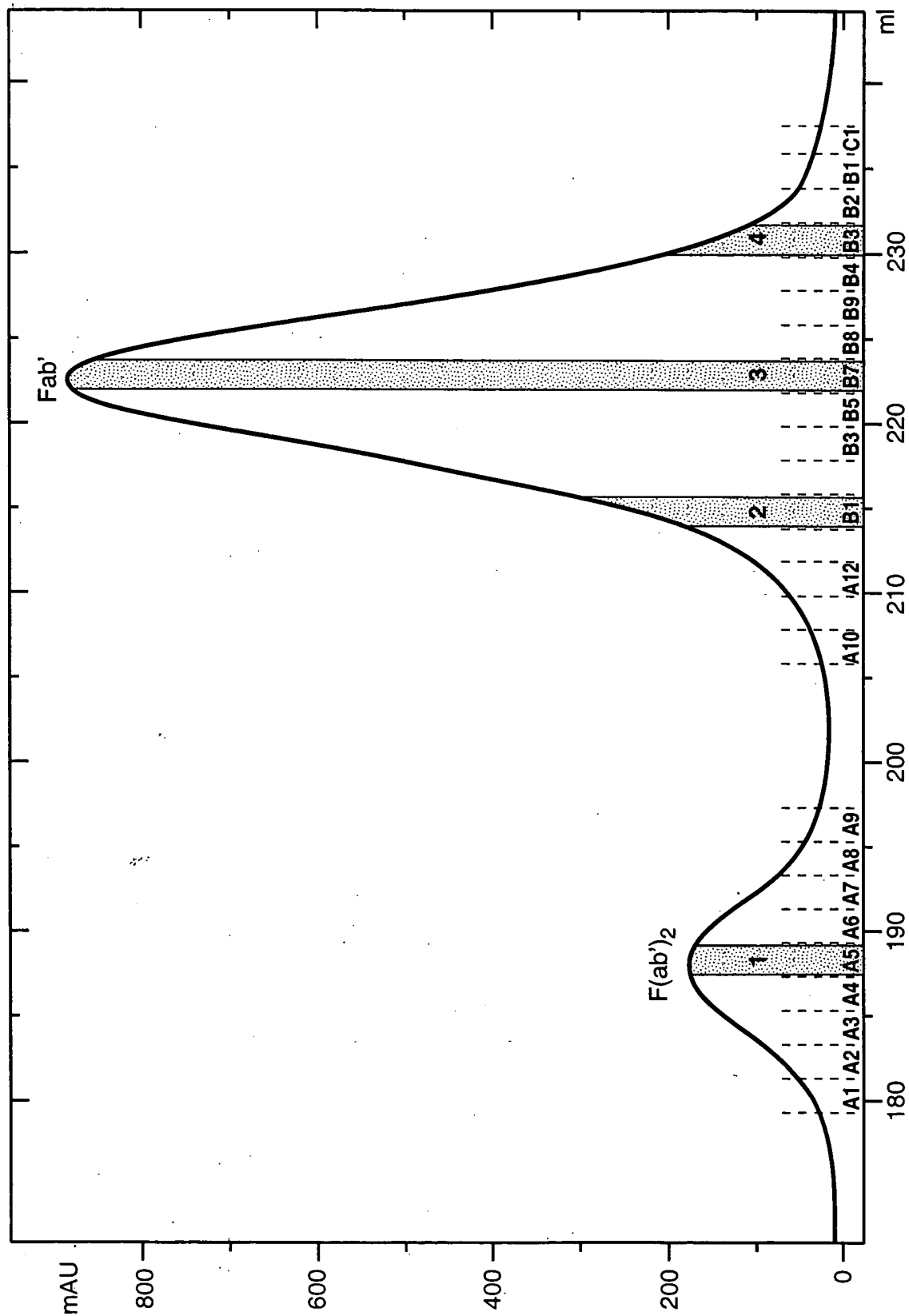
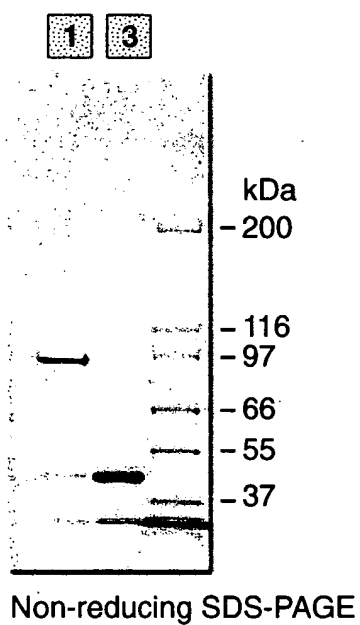
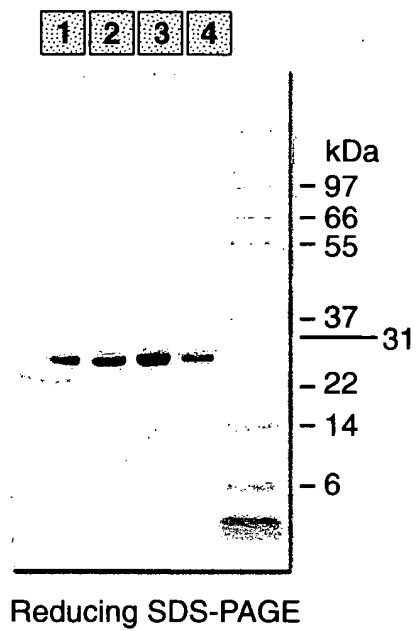
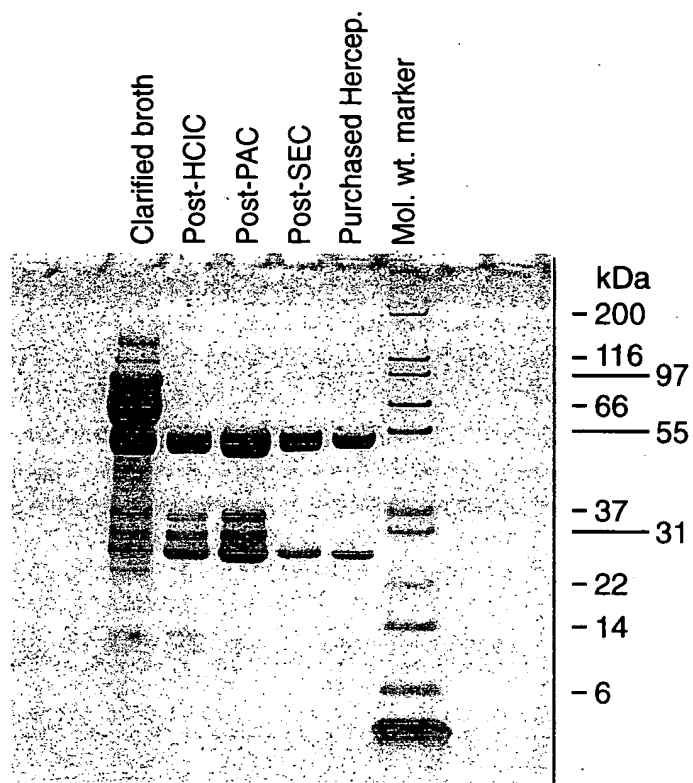


FIG. 8A

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**FIG._8B**

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Reducing SDS-PAGE

FIG._9

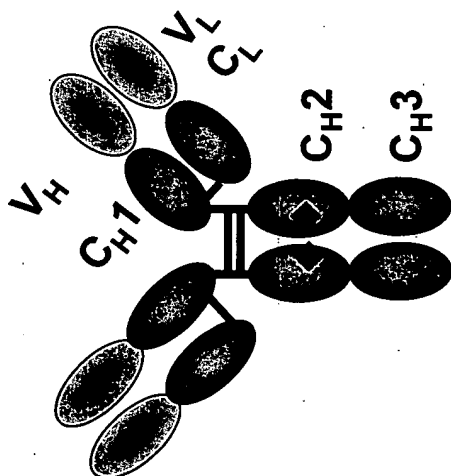


Figure 1A: General Schematic of antibody structure

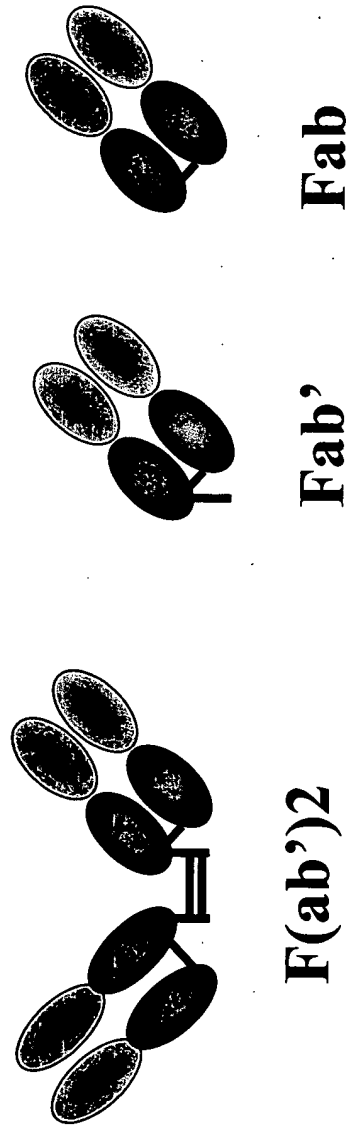


Figure 1B: General Schematic of antibody fragments

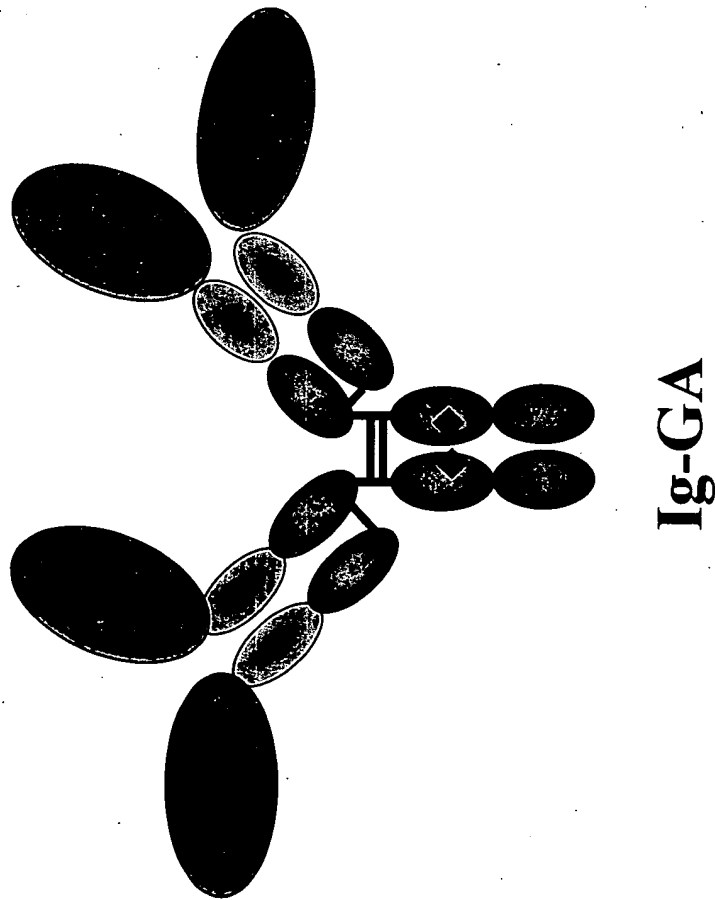
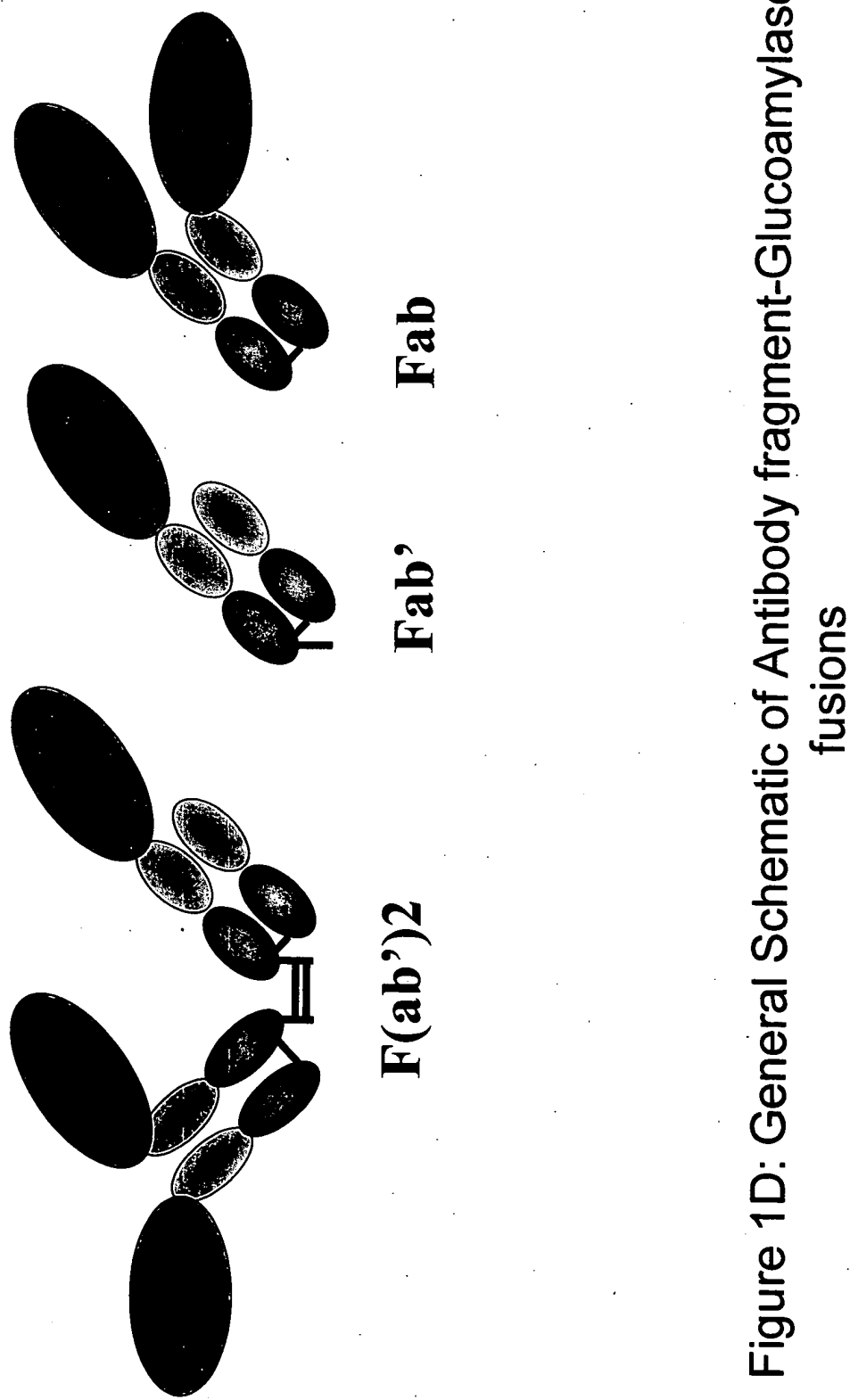


Figure 1C: General Schematic of Antibody-Glucoamylase fusion



Adsorption by Hydrophobic Association

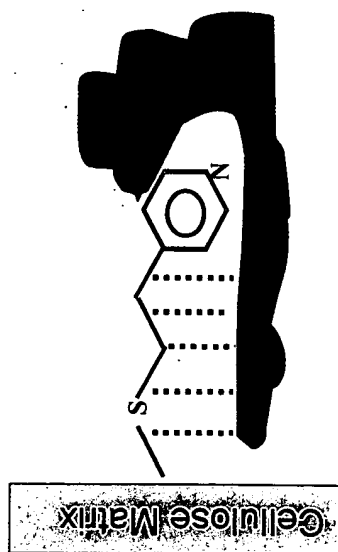


Figure 2A

Desorption by Ionic Repulsion

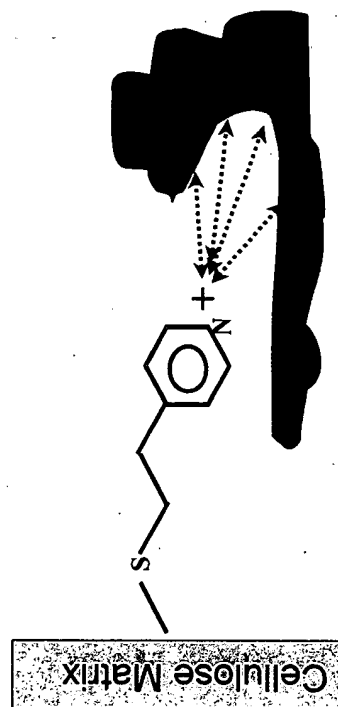


Figure 2B

Figure 3A

Protein Purification
Fong et al.
U.S.S.N. 10/663,483
Docket No. GC775-2
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Sample loaded: 50 mL treated Fermentation 503 Supernatant UFC. Treatment includes neutralization of 500 mL to pH 7.7 with 50 mL 1 M NaOH; centrifugation 25000xg; and vacuum filtration through 0.8, 0.45, and 0.22 μ m filters with 10 g FW12 precoat.

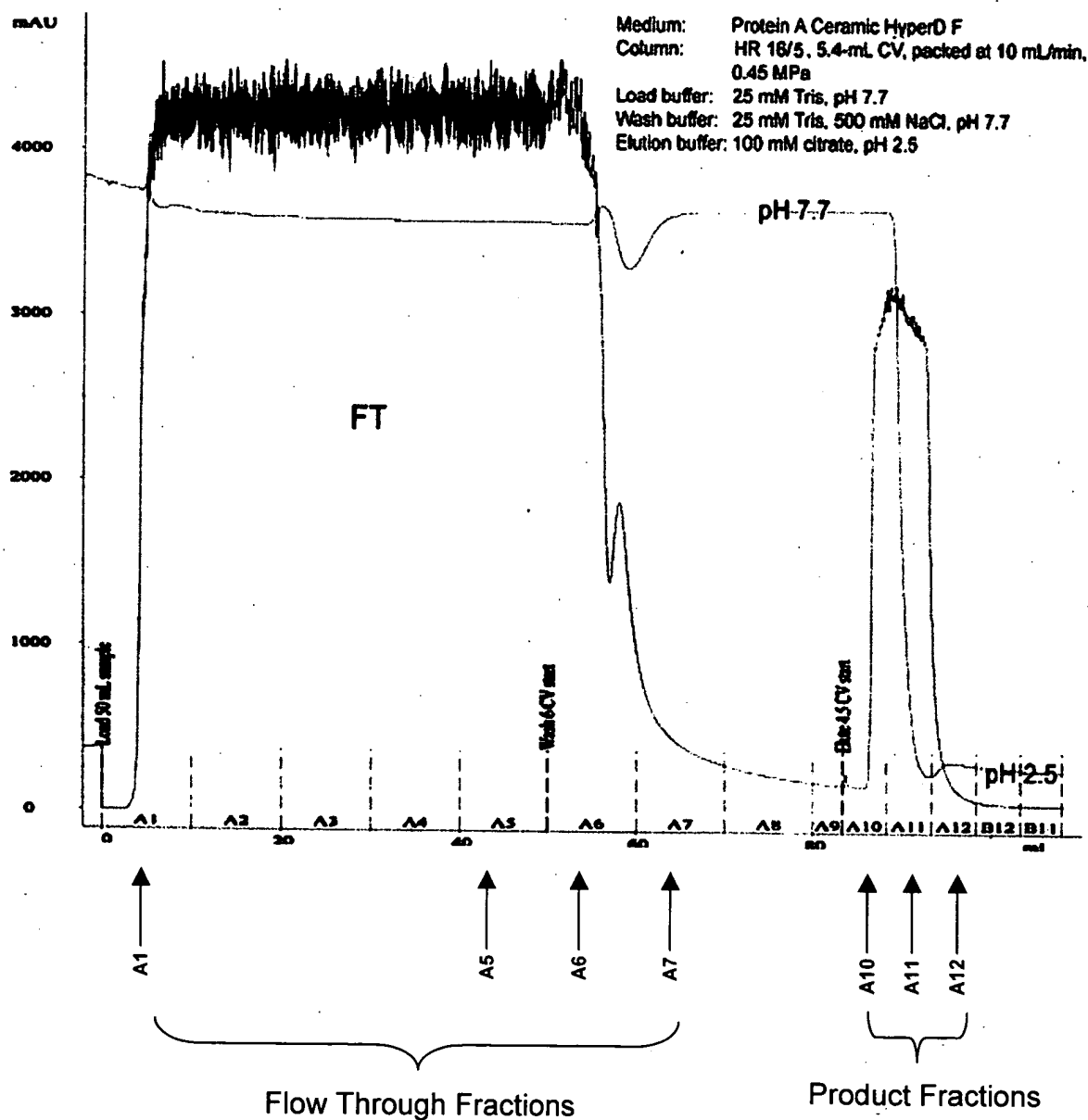
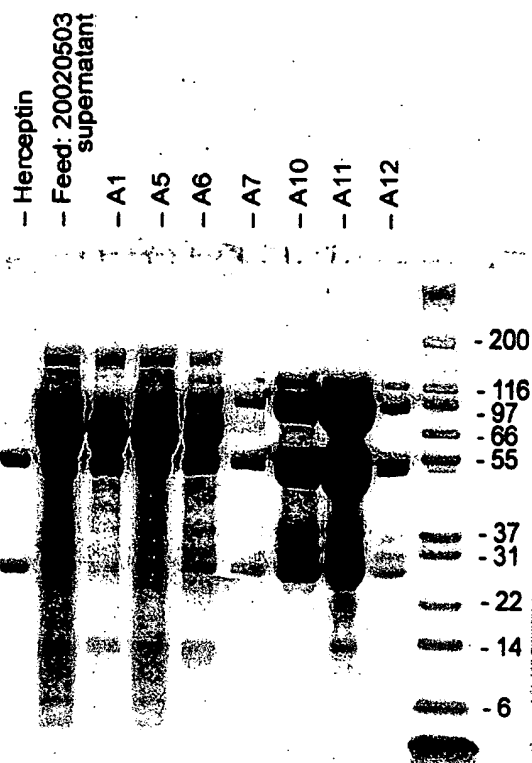


Figure 3B

PAC062602

4-12%
Bis-Tris
MES
SDS

Reducing



PAC062602

4-12%
Bis-Tris
MOPS
SDS

Non-reducing

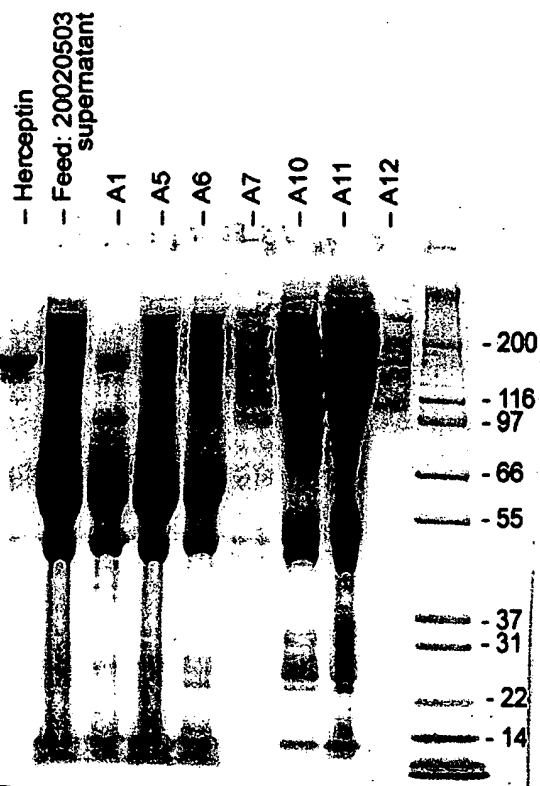


Figure 4A

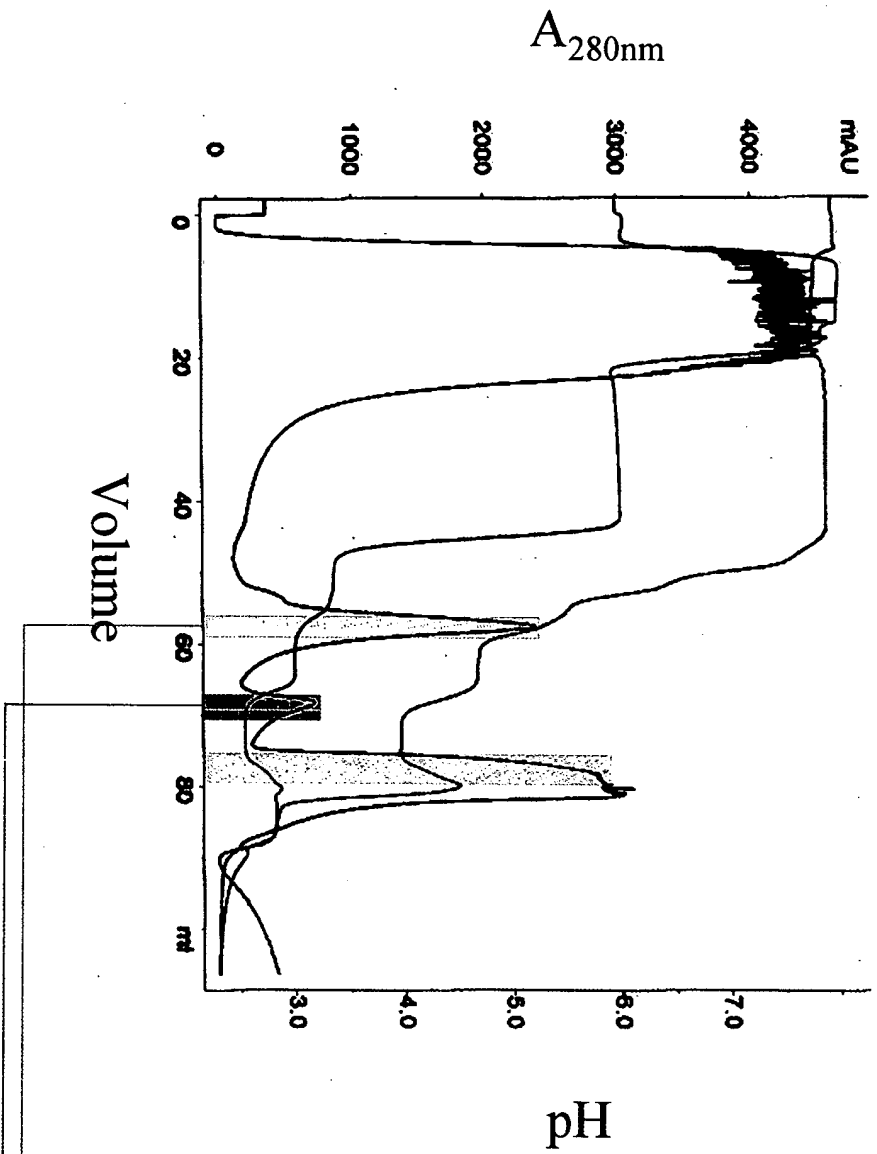


Figure 4B

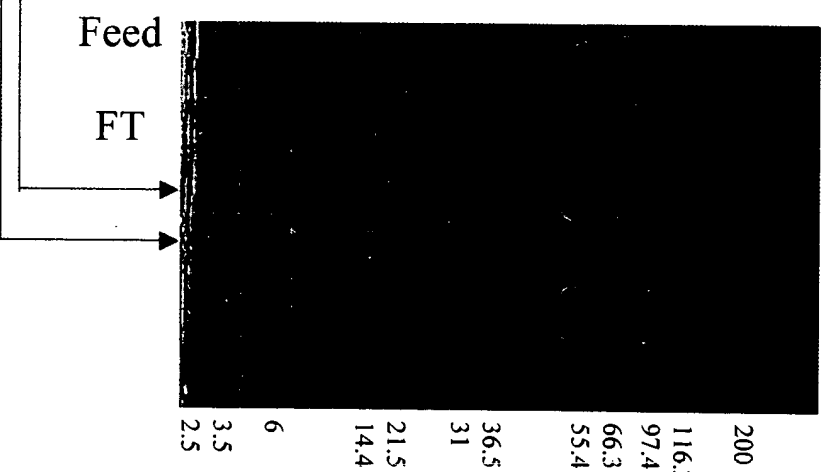


Figure 4: HCIC for mAb/mAB-GA Separation

Figure 5A

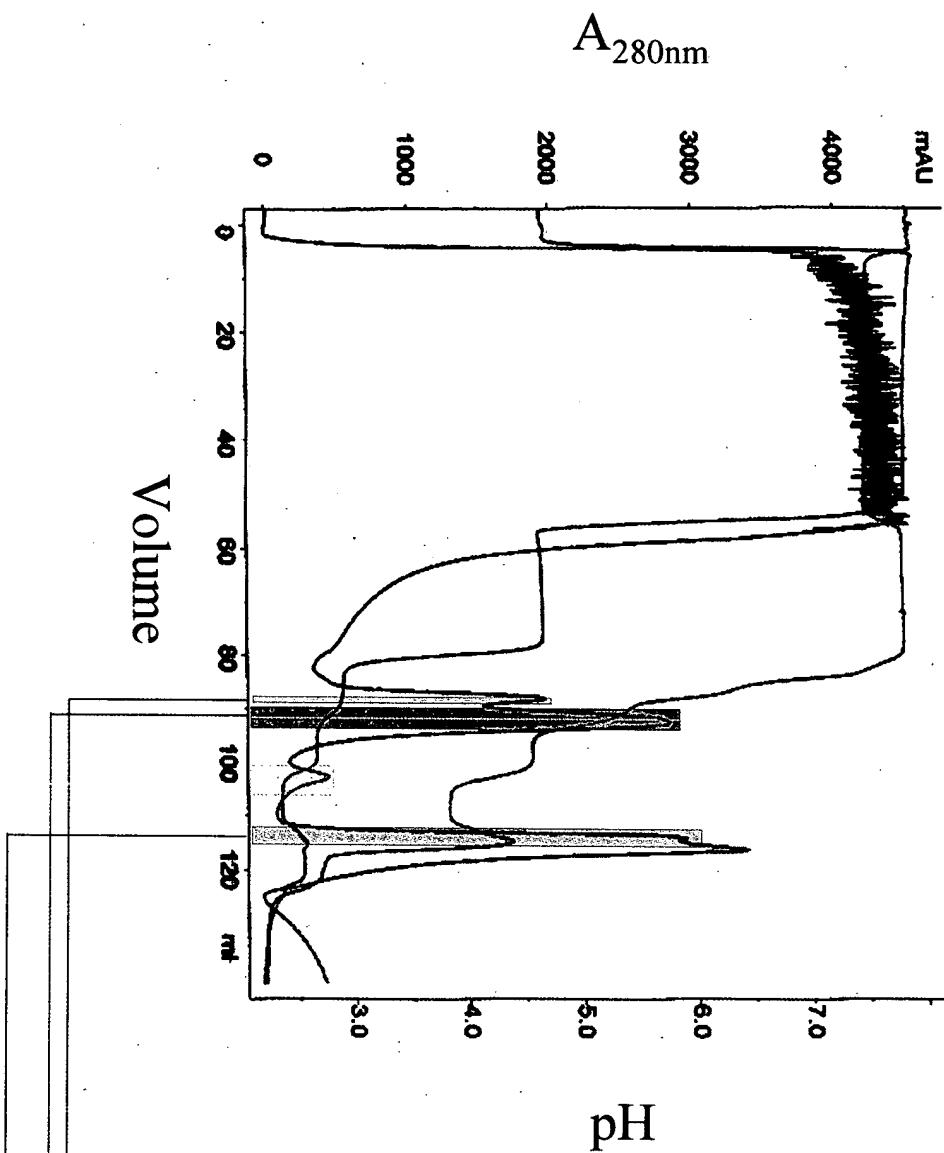


Figure 5B

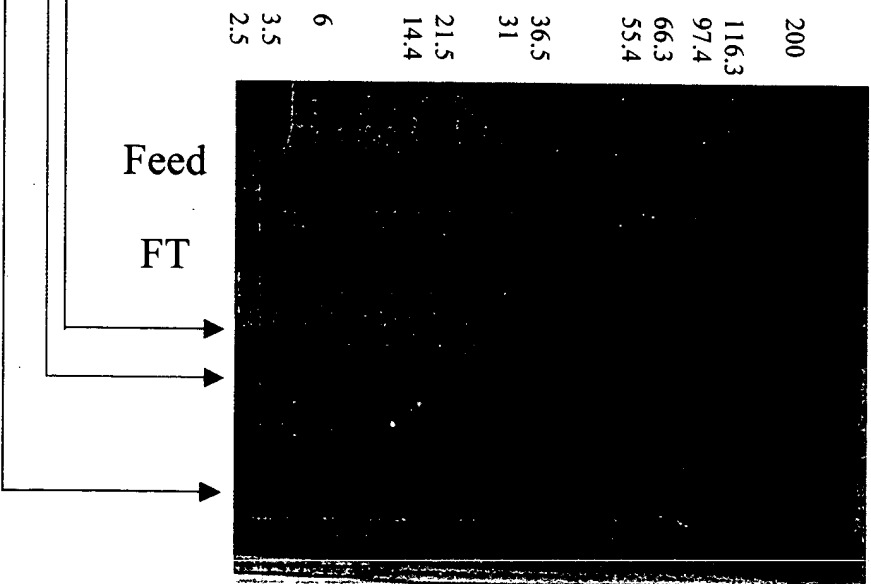


Figure 5: HCIC for Fab'/Fab'-GA Separation

Figure 6

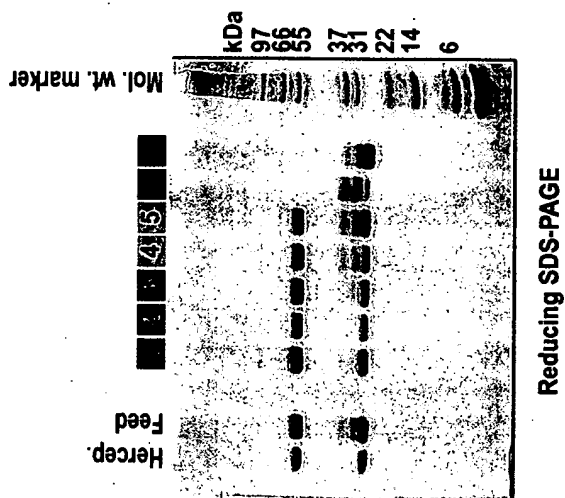
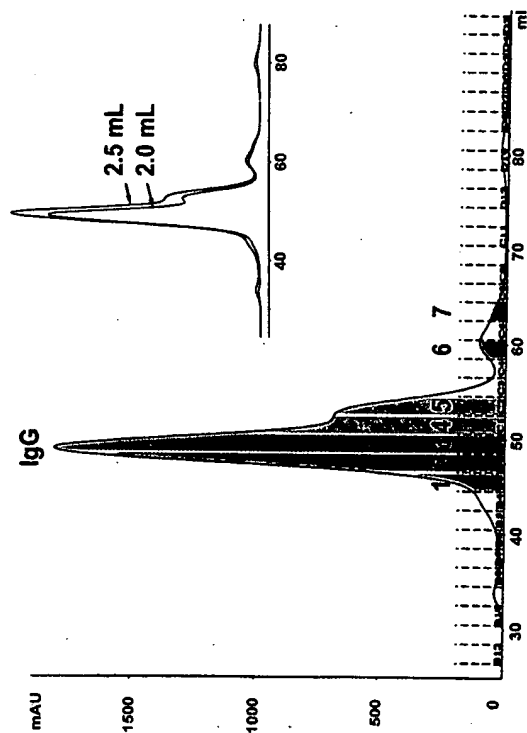


Figure 7

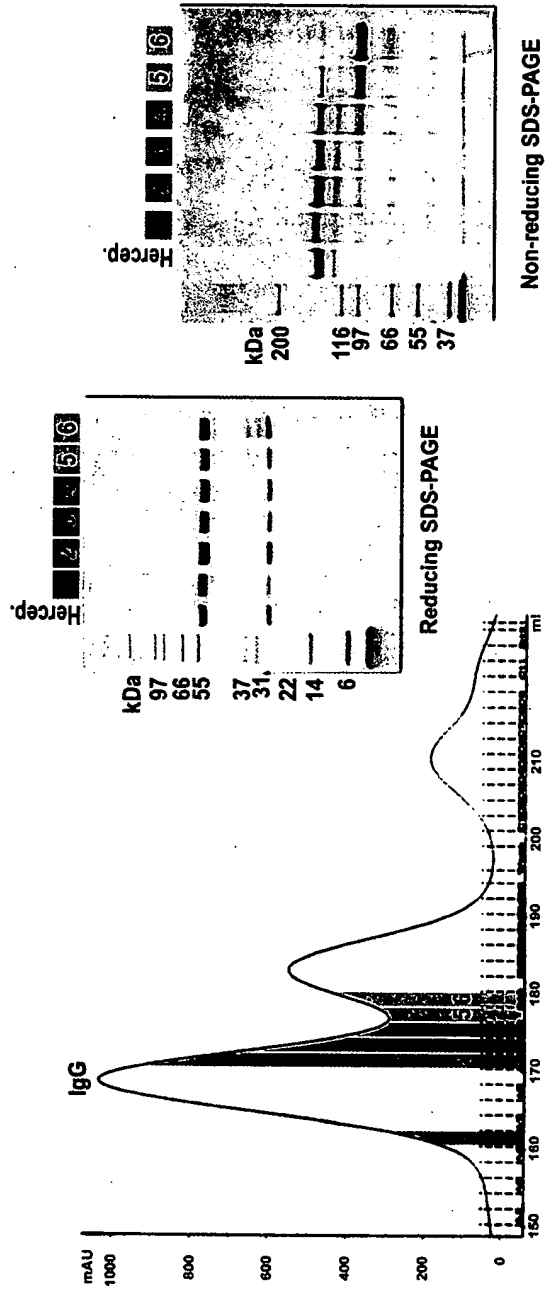


Figure 8

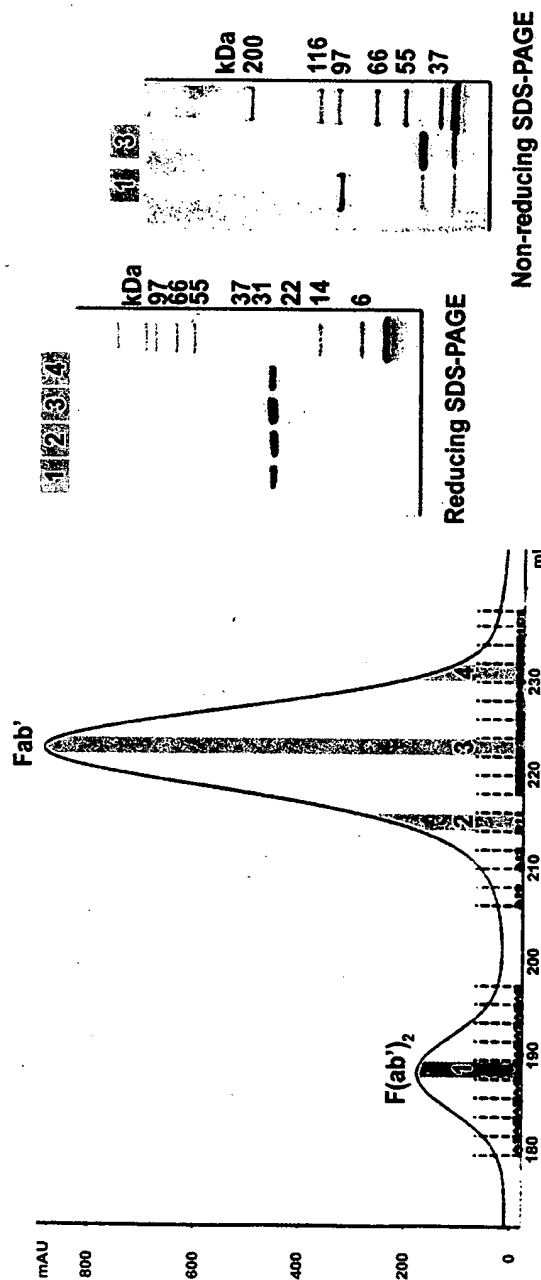


Figure 9

